Work Orde May-29-12 1:04	er ID 84907	*84907*								Page 1
Revision ID:	D209-669-014	· · · · · · · · · · · · · · · · · · ·	Accept	*N900	<b>04</b> 0	1100	)*	-	art <b>*</b> [	IS1*
	Skidtube RH 29/05/2012	*1* *1*		Cust Item I Customer:	D:			Sí	op <b>*</b>	IS2*
Approvals:	Process Plan: MLJ  QC:	Date: \2 05 2 Date:	O Tooling: SPC (Y/N):		te:				art *N	IR1* IR2*
Sequence ID/ Work Center II	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D209-669-014 DSI 9450	Rev B Rev A	٨								
*1 \\ \DC\\\ Document Control	DOCUMENT CONTR <b>Memo</b> Photocopy	OL SU bluefile & type labels per P	0.00 AS 0.00 2-66 PP D209-669-014 CHG	17 looks	599 V	ı				

110

Pick Kit

0.00

\*110\* Packaging

Memo

0.00

Packaging

B 84899

Dart Aerospace I	Ltd
------------------	-----

Dail AC	ospace	Liu							
W/O:			WC	ORK ORDER CHANGE	S				
DATE	STEP	PR	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	):	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date: _	
	Re	esolution:	Disposition	n: <u>'</u>	QA: N/C C	osed:		Date: _	
NCR:				ER NON-CONFORMAN	ICE (NCF	R)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description  Chief Eng	Section B Sign & Date		cation on C	Approval Chief Eng	Approval QC Inspector
				•.					

0.00

Memo

Quality Control

	Johann	LIG												
W/O:			WORK ORDER CHANGES											
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
			<u> </u>											
Part No	:	PAR #:	Fault Categ	ory:	NCR: Yes	No <b>DQ</b>	A:	_ Date: _						
	Re	esolution:						Date: _						
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCR	)								
DATE	STEP	Description of NC				Verific	cation	Approval	Approval					
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	ion C	Chief Eng	QC Inspector					
					1									
· <del>-</del>														
									ż					
									1					

## **Picklist Print**

May-29-12 1:04:53 PM

Work Order ID: 84907

D209-669-014

Parent Item Name: Skidtube RH

\*84907\*

\*D209-669-014\*

Start Date: 29/05/2012

**Required Date:** 16/07/2012

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

Parent Item:

New IPP 08.02.13 new issue EC, verified by:DD

		PP Rev:B 08-05-2	20 chg QTY of D	2570	DD verified	by:								
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
	D209-669-043		Manufactured	No			110	Each	2.0000	1	1			
7	*D209-669 Replacement Skidtube	)-N43*								**	_ E	y899	9	
					Location	<u>1</u>	Loc	<u>Qtv</u>	Loc Code		′	•		
					Mezz			2				_		
						39205 39206		1		_		_		
	D2917-2		Manufactured	No		39206	110	ı Each	1.0000	2		_	^	
_	*D2917-2*		Manaractarea				110	Lacii	1.0000	**	2	. 0./		1
-	Saddle RH										8493	39 54	4	
					Location	1	Loc	<u>Qty</u>	Loc Code			,		
					ST424			1				_		
1	D2918-2			<b>.</b>		52129		1		_	(X_	_		
Ū			Manufactured	No			110	Each	1.0000	2	2			/ /
	*D2918-2*									**	3494	1015	12	17/125/
					Location	<u>!</u>	Loc	Qt <u>y</u>	Loc Code			30 K	<b>5</b> 52	
					ST424			1					Other Park	
						52133		1			14	<del>-</del> -		

Dart Aeı	rospace	Ltd								,
W/O:			W	ORK ORDER CHANG	ES	<u> </u>				
DATE	STEP	PRO	PROCEDURE CHANGE				Date	Qty	Approvai Chief Eng / Prod Mgr	Approval QC Inspector
								: : :		
				·						
			·							
Part No	:	PAR #:	Fault Cate	egory:	_ NCR	: Yes	Vo DQ	A:	_ Date: _	
	Re	esolution:	Disposition	on: '	_ QA:	N/C Cld	sed:		Date: _	
NCR:			WORK ORE	ER NON-CONFORMA	NCE	(NCR	)			
		Description of NC		Corrective Action Section	on B		Verifie	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date		on C	Chief Eng	QC Inspector
·										
	3	•								

Picklist Print May-29-12 1:04:53 PM								. ,	·	Page 2
Work Order ID: 84907  Parent Item: D209-669-014  Parent Item Name: Skidtube RH	• · · · · • • •		4907* 209-669-0	)14*			art Date: tart Qty:	29/05/2012 1.00	Required D	Date: 16/07/2012 Qty: 1.00
*AN4-51A Bolt	Purchased	No	·	110	Each	302.0000	8 **		e - o o o o o o o o o o o o o o o o o o	20
D2570	Manufactured	No	Location 362 ST361 119798 121584	<u>Lc</u> 110	200 200 102 30 72 Each	Loc Code 711.0000	24	8	- - - -	
*D2570* Bushing	ivianuractured	140		110	Eacii		24 **	B8541	isy	
			Location ST011 72960 78586 79493 81956 81957 82874	<u>Lo</u>	c Oty 711 41 9 12 24 400 225	Loc Code			- - - -	<b>5</b> 1
*MS21042L4 *MS21042I 4*	Purchased	No	020/4	110	Each	4,095.000	24 <b>**</b>	(247)/	a	<b>6</b> 01

W/O:			WORK ORDER CHANGES										
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
,													
				·									
Part No	:	PAR #:	Fault Cate	egory:	NCR: Yes	No DQ	A:	_ Date: _					
	R	esolution:	on: <u>'</u>	QA: N/C CI	osed:		Date: _						
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR	1)							
DATE	STEP	Description of NC		Corrective Action Section			cation	Approval	Approval				
DAIL	O.L.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	ion C	Chief Eng	QC Inspector				
							,						
	1												
						-							
							-		:				

May-29-12 1:04:53 PM									Page 3
Work Order ID: 84907		*8	4907	*		-	······································		
<b>Parent Item:</b> D209-669-014				669-0	11/1*				
Parent Item Name: Skidtube RH		• .	JZ (131 <b>-</b>	()()://-(	<i>)</i>		Start Date:	29/05/2012	Required Date: 16/07/2012
							Start Qty:		
AN5-36A	<b>D</b> 1 1	<b>X</b> 1						1.00	Required Qty: 1.00
	Purchased	No			110	Each	184.0000 4	4 _ /	
∕ *AN5-36A*							**	<u> 5</u> c	
			Location		<u>I</u>	oc Qty	Loc Code		
			340			134			
				121181		34			
				121652		100			<del></del>
			ST340			50		-	<u> </u>
ANOCOIDEIC NACILIODOSCON				121708		50		<del>Y</del>	<u> </u>
AN960JD516 NAS1149D0563J	Purchased	No	•		110	Each	0.0000 8	8	$\cap$
*AN960.ID516*							**		M119546
MS21042L5	Purchased	No			110	Each	1,447.000 4	4	)
*MS21042L5*							**	77	
			<b>Location</b>		<u>L</u>	oc Qty	Loc Code		0,1
			300			500			
				121652		500	,		_
			ST300			947			
				108827		8			
				116105		5			_
				116548		43			<u> </u>
				117611 <u>1</u> 19109		18 865		<i>-</i>	_
/			•	17651		8		/	_
AN4-7A	Purchased	No			110	Each	124.0000 16	16	_
*AN4-7A*							**	M122	2/4/ 8/12/12
			Location		<u>L</u> .	oc Qty	Loc Code		
			ST356			124			
				117514		24			
				120770		100			_
May-29-12 1:04:53 PM				Shop Pa	acket Print			-	Page 3

Page 3

**Picklist Print** 

	P									
W/O:			W	ORK ORDER CHANGI	ES					
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
								-		
									•	
Part No	•	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A:	Date:		
		esolution:						•		
NCR:		1	WORK OR	DER NON-CONFORMA	NCE (NCR	)				
DATE	CTED	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspector	
					,					
					<b>k</b>			·		
									:	

May-29-12 1:04:53 PM

Work Order ID: 84907

D209-669-014

Parent Item Name:

Parent Item:

AN960JD416

Skidtube RH

NAS1149D0463J Purchased

\*84907\*

\*D209-669-014\*

Start Date: 29/05/2012

**Required Date: 16/07/2012** 

Start Qty: 1.00

Required Oty: 1,00

30.0000

Loc Code

Loc Code

No

Manufactured No Location Loc Qty ST351 30 116289 10 119097 20

110

110 Each

Each

86.0000

\*\*

D2929

D2930

Manufactured No Location Loc Qty ST021 86 53564

86 110 Each

102.0000 \*\*

D3405-041

Lug Assembly

Manufactured No Location Loc Qty Loc Code ST021 102 53563 102 110 Each 6.0000

B85450 8 02/128

Location Loc Qty Loc Code ST478 6 62227 77000 2 82031

May-29-12 1:04:53 PM

**Shop Packet Print** 

82032

Page 4

		<del></del>											
W/O:			WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No <b>DQ</b>	A:						
	R	esolution:	Disposition	n: <u>'</u>	_ QA: N/C (	Closed:		Date: _					
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC		Corrective Action Section		Verific		Approval	Approval				
DAIL	J	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	Secti	on C	Chief Eng	QC Inspector				
							<del></del>	<u>-</u>					
									,				

May-29-12 1:04:53 PM

Work Order ID: 84907

Parent Item:

D209-669-014

Parent Item Name: Skidtube RH

\*84907\* \*D209-669-014\*

118451

104603

Start Date: 29/05/2012

**Required Date: 16/07/2012** 

Start Qty: 1.00

Required Qty: 1.00

AN4C47A **\*AN4C47A\*** 

Purchased

No

110

Loc Qty

Loc Qty

40

40

1306

6

Each

48.0000

Loc Code

\*\*

MS21043-4

Purchased

No

Location

ST361

119798 2 121009 22 121585 18 110 Each

1,346.000

Loc Code

\*\*

Manufactured

No

ST301

Location

FG

119546 147 659 121652 500

2.0000

\*\*

Location Loc Oty Loc Code ST478 2

110

82038

2

Each

May-29-12 1:04:53 PM

**Shop Packet Print** 

Page 5

	•													
W/O:			WORK ORDER CHANGES											
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
			٩											
Part No	:	PAR #:	Fault Cate	jory:	NCR: Yes	No DQ	A:	Date:						
	Re	solution:	Disposition	n: <u>'</u>	QA: N/C Cld	sed:		Date: _	<u> </u>					
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCR	)								
DATE	STEP	Description of NC	Corrective Action Section		Verific	cation	Approval	Approval						
DAIL	JIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	ion C	Chief Eng	QC Inspector					
			97.											
				•										
				ý·										
									f					

Picklist Print May-29-12 1:04:53 PM									•.	<del>_</del> ,	Page 6
Work Order ID: 84907  Parent Item: D209-669-014  Parent Item Name: Skidtube RI	H	*8490 *D209	7* )-669-(	14*	•		tart Date: 2			<b>Date:</b> 16/	
D3407-041 *D3407-041* Tow Ring	Manufactured	No		110	Each	27.0000	Start Qty: 1	.00 B83	-	d Qty: 1.0	110D
		Locat ST462		<u>Lo</u>	27 6 19 2	Loc Code			-		\ >
D3456-1 *D3456-1* Washer	Manufactured	No		110	Each	156.0000	\ <b>*</b> *	1		St	9
		<u>Locat</u>	ion	Loc	e Qty	Loc Code					
		FG			7				_		
3t 8	3318	ST044	25701 80252 81876 83584		7 149 1 48 100				- - -		
D3417-5 *\(\mathbf{D}\)3417-5* Washer	Manufactured	No		110	Each	78.0000	2 **	2/2/7	1/12 54	1	SP
		Locat	<u>on</u>	Loc	<u>Otv</u>	Loc Code					
		ST042			78						•

28

78842

W/O:			V	ORK ORDER CHANGE	S				· · · · · · · · · · · · · · · · · · ·
DATE	STEP	PROCE	EDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
<del></del>			· · · · · · · · · · · · · · · · · · ·	<del></del>		<u> </u>			
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No <b>DQ</b>	A:	Date:	
	R	esolution:	Disposit	ion: <u> </u>	QA: N/C CI	osed:		Date: _	
NCR:		WC	ORK OR	DER NON-CONFORMA	NCE (NCF	R)			
DATE	OTED	Description of NC	Corrective Action Section B			Verific	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		Section C		QC Inspector
		,							er mer ver er e
					-				

# **DART SERVICE INSTRUCTION**

TO AMEND INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B

#### **INSTRUCTIONS:**

- 1) FOR D209-669-011/-012/-013/-014 SKID TUBES @ CHANGE 003 AND SUBSEQUENT, MODIFY THE FOLLOWING:
  - a) REPLACE THE D2968-041 TOW RING WITH THE D3407-041 TOW RING ASSEMBLY.
  - b) REPLACE THE D2736-1 AND D2736-3 GHW LUGS WITH THE D3405-041 AND D3405-043 LUG ASSEMBLIES.
  - c) AMEND THE PARTS LIST IN SECTION 5.0 OF INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B AS SHOWN ON PAGE 2 OF THIS DSI.

NOTE: ALL INSTALLATION FASTENERS FOR THE ABOVE CHANGES HAVE BEEN UPDATED. SEE THE AMENDED PARTS LIST ON PAGE 2 FOR DETAILS.

SHOP COPY
RETURN TO
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. RYSO T MLJ
17/05/30

Α	NEW IS	SUE		AJS	AJS 09.02.24				
REV.			BY	BY DATE					
DESIGN		Α	<b>√</b> S	DART AEROSP	SPACE LTD				
DRAWN		Ą	JS	HAWKESBURY, ONTARIO, CANADA					
CHECKE	D		7	DRAWING NO.		REV. A			
MFG. APPR. N/An		/ <del>/</del> 2	DSI 9450	:	SHEET 1 OF 3				
APPROV	'ED	$-\mathcal{M}$	$Y^-$	TITLE		SCALE			
DE APP	₹.	~ <b>/</b>	7	SKIDTUBE INSTALLATIONS	3	NTS			
DATE				COPYRIGHT © 2009 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  NOT TO BE USED FOR ANY PURPOSE OR COPYLD OF COMPANY. A "FOLLO OF ANY CITIES PERSON WITHIN IT  WILLIAM THE REPRESSION HARD AND A BASISPACE LTD.					

Dart Aerospace
----------------

W/O:			N	ORK ORDER CHANGI	ES	······································		*
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							- Floativigi	
Part No	•	PAR #:	_ Fault Car	degory:	NCR: Yes	No DQA:	Date: _	<del></del>
		esolution:						
NCR:		V	ORK OR	DER NON-CONFORMA	NCE (NCF	1)		
DATE	STEP	Description of NC		Corrective Action Section		Verification	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section C	Chief Eng	QC Inspector
_						·		
					,			
			1					

<sup>→</sup> H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

#### **5.0 PARTS LIST**

ITEM	QTY -011	QTY -012	QTY -013	QTY -014	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	х						D209-669-011	SKIDTUBE INSTALLATION, LH (AH-1W/J)
		х					D209-669-012	SKIDTUBE INSTALLATION, RH (AH-1W/J)
			х				D209-669-013	SKIDTUBE INSTALLATION, LH (AH-1P/F/S)
				х			D209-669-014	SKIDTUBE INSTALLATION, RH (AH-1P/F/S)
	1	1			Х		D209-669-041	REPLACEMENT SKIDTUBE (AH-1W/J)
			1	1		х	D209-669-043	REPLACEMENT SKIDTUBE (AH-1P/F/S)
					Γ		L	

#### IS:

		1		T T	<del></del>	
50	4	4	1	1	D3405-041	LUG ASSEMBLY
51	8	8	4	4	AN4C47A	BOLT
52	16	16	8	8	D2570	BUSHING
53	8	8	4	4	MS21043-4	NUT
54			1	1	D3405-043	LUG ASSEMBLY
60	1	1	1	1	D3407-041	TOW RING ASSEMBLY
61	1	1	1	1	D3456-1	WASHER
62	1	1	1	1	MS21043-4	NUT
63	2	2	2	2	D3417-5	WASHER

#### WAS:

	T	,		<del>1</del>	<del></del>	
50	4	4	1	1	D2736-1	GHW LUG
51	8	8	4	4	AN4-46A	BOLT
52	16	16	8	8	D2570	BUSHING
53	8	8	4	4	MS21042L4	NUT (OR MS21042-4)
54			1	1	D2736-3	GHW LUG
60	1	1	1	1	D2968-041	TOW RING
61	1	1	1	1	AN970-4	WASHER
62	1	1	1	1	MS21042L4	NUT (OR MS21042-4)

DESIGN	AJS	DART AEROSPACE LTD			
DRAWN	AS	HAWKESBURY, ONTARIO, C	CANADA		
CHECKED	1	DRAWING NO.	REV. A		
MFG. APPR.	N/A)	DSI 9450	SHEET 2 OF 3		
APPROVED	JAN	TITLE	SCALE		
DE APPR.	-#	SKIDTUBE INSTALLATIONS	NTS		
DATE 09.0	)2.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND TOWN-DENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  NOT TO BE USED FOR ANY PURITY SE OR COPIED OR COPYLIN CALLED TO ANY OTHER PERSON WITHOUT  WHICH THE PRIVATE ARE AND THE PRIVATE AREAS AND THE PRIVATE A			

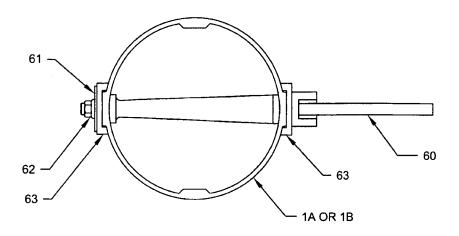
Dart Aerospace Ltd	Dart	<b>Aeros</b>	pace	Ltd
--------------------	------	--------------	------	-----

W/O:			W	ORK ORDER CHANG	ES	100000000000000000000000000000000000000		
DATE	STEP	PRO	CEDURE CH	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector	
							, , , , , , , , , , , , , , , , , , ,	
					ľ			
<u> </u>	<u> </u>							
Part No	:	PAR #:	Fault Cat	tegory:	_ NCR: Yes	No DQA:	Date: _	
	R	esolution:	Dispositi	ion:	_ QA: N/C Cld	osed:	Date: _	
NCR:		V	VORK ORI	DER NON-CONFORMA	NCE (NCR	)		
DATE	STEP	Description of NC		Corrective Action Secti		Verification		Approval
DAIL	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
1		1						

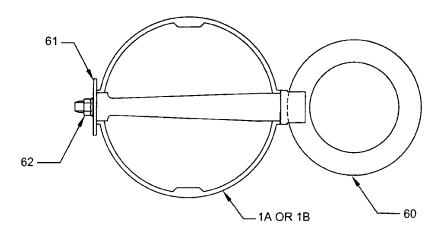
<sup>→</sup> H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

INSTALL TOW RING ASSEMBLY AS SHOWN BELOW (REFER TO SECTION F-F OF IIN-D209-669 REV. B.

IS:



WAS:



NO PICTORIAL CHANGE REQUIRED FOR GROUND HANDLING WHEEL LUG CHANGES.

DESIGN	AJS	DART AEROSPACE LTD		
DRAWN	AJS	HAWKESBURY, ONTARIO, C		
CHECKED	1	DRAWING NO.	REV. A	
MFG. APPR.	N/A)	DSI 9450	SHEET 3 OF 3	
APPROVED	W	TITLE	SCALE	
DE APPR.	-#	SKIDTUBE INSTALLATIONS	NTS	
DATE 09.0	2.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT, IT IS NOT TO BE USED FOR ANY PIPPIPPIPPIPPIPPIPPE OF CHEEDED OF CHANNING LIST BY TO ANY OTHER UP PERSON ALTHOUGH.		

Dail Moi Gobago Ela	erospace Ltd
---------------------	--------------

	•								
W/O:			W	ORK ORDER CHANG	ES			· · · · · · · · · · · · · · · · · · ·	
DATE	STEP	PRO	PROCEDURE CHANGE				Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		1							1
									1
								·	
Part No		PAR #:	Fault Cat	egory:	_ NCR: Ye	s No DO	A:	Date: _	
Resolution:			Disposition: Q			Closed: _	•	Date:	
NCR:	,	V	VORK ORI	DER NON-CONFORMA	ANCE (NO	R)			
DATE	STEP	Description of NC		Corrective Action Section B			ication	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sigı Da		tion C	Chief Eng	QC Inspector
, ,									
							,		
] 		·							
									,
1	I	_	l i		1			1	1